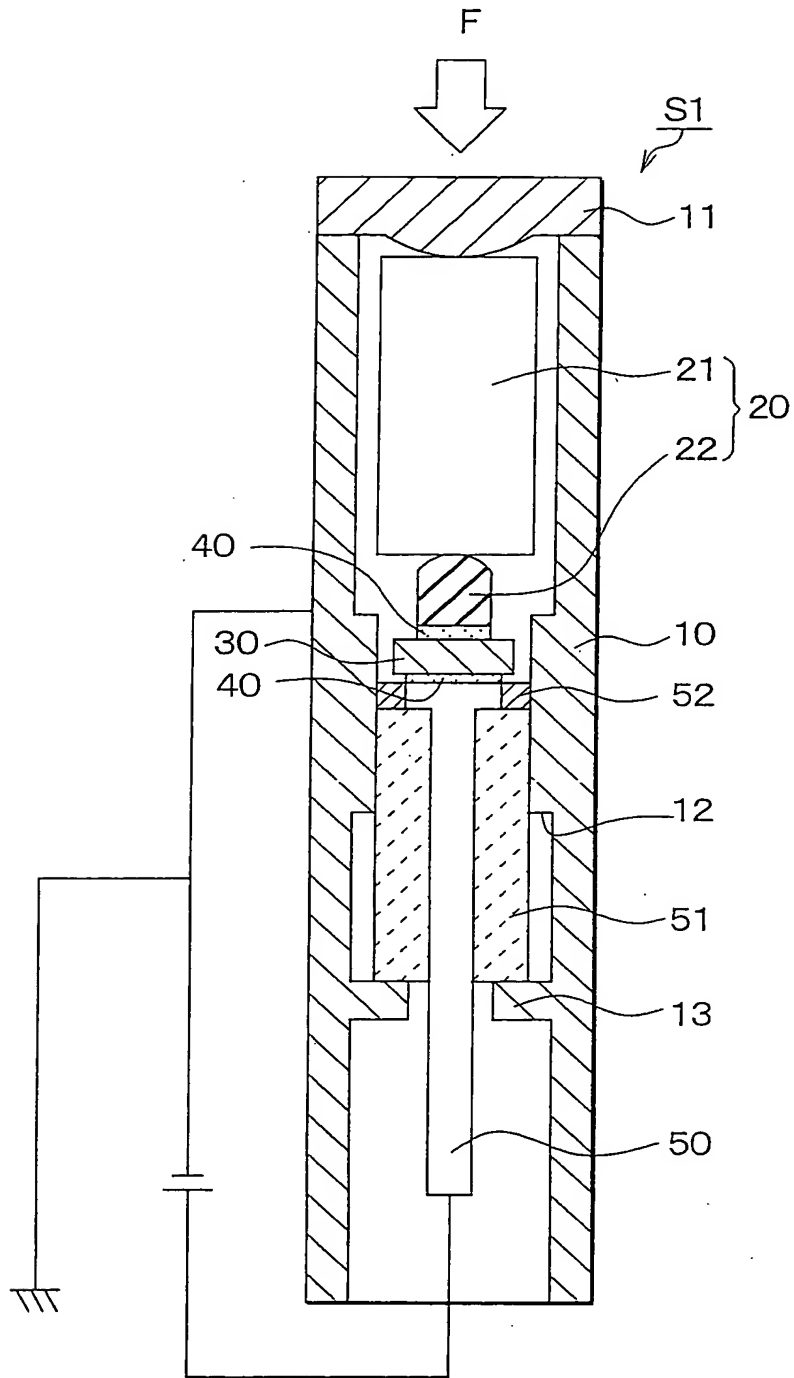


FIG. 1



**FIG. 2**

A cross-sectional view of a semiconductor device in the  $\langle 110 \rangle$  axis direction. The device consists of a substrate 50 with a lower layer 40. Above this is a layer 35b, followed by a layer 33 containing an  $N^+$  region. A large  $N^-$  region 30 is above layer 33. A thin layer 32 is on top of the  $N^-$  region. A  $P^+$  region 32a is formed within layer 32. The top surface of the  $P^+$  region is labeled 31. On the left and right sides, there are regions labeled 35c and 35a, respectively. Between these regions are structures 34a and 34b. A central structure 40 is shown with a downward force  $F$  applied to its top surface. The  $\langle 110 \rangle$  axis direction is indicated by a double-headed arrow pointing to the right.

**FIG. 3**

30

31

32

32a

35a

34b

34a

35c

22(20)

$\langle 110 \rangle$

$\langle 100 \rangle$

FIG. 4

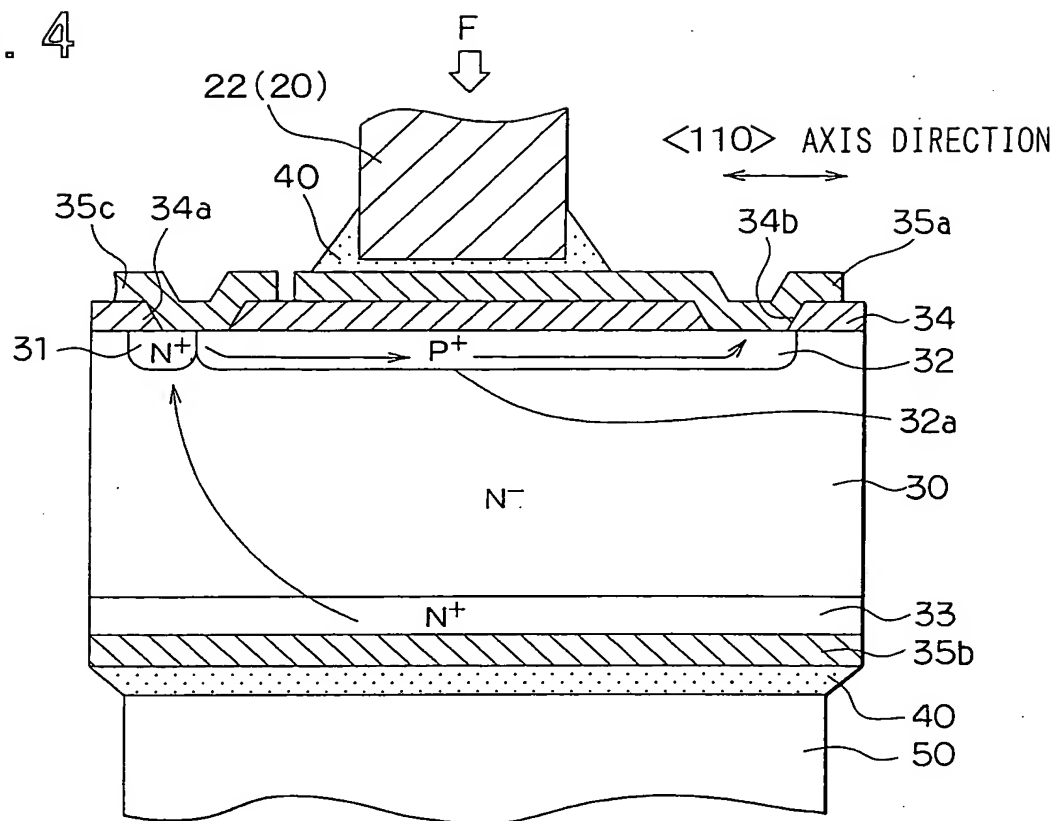


FIG. 5

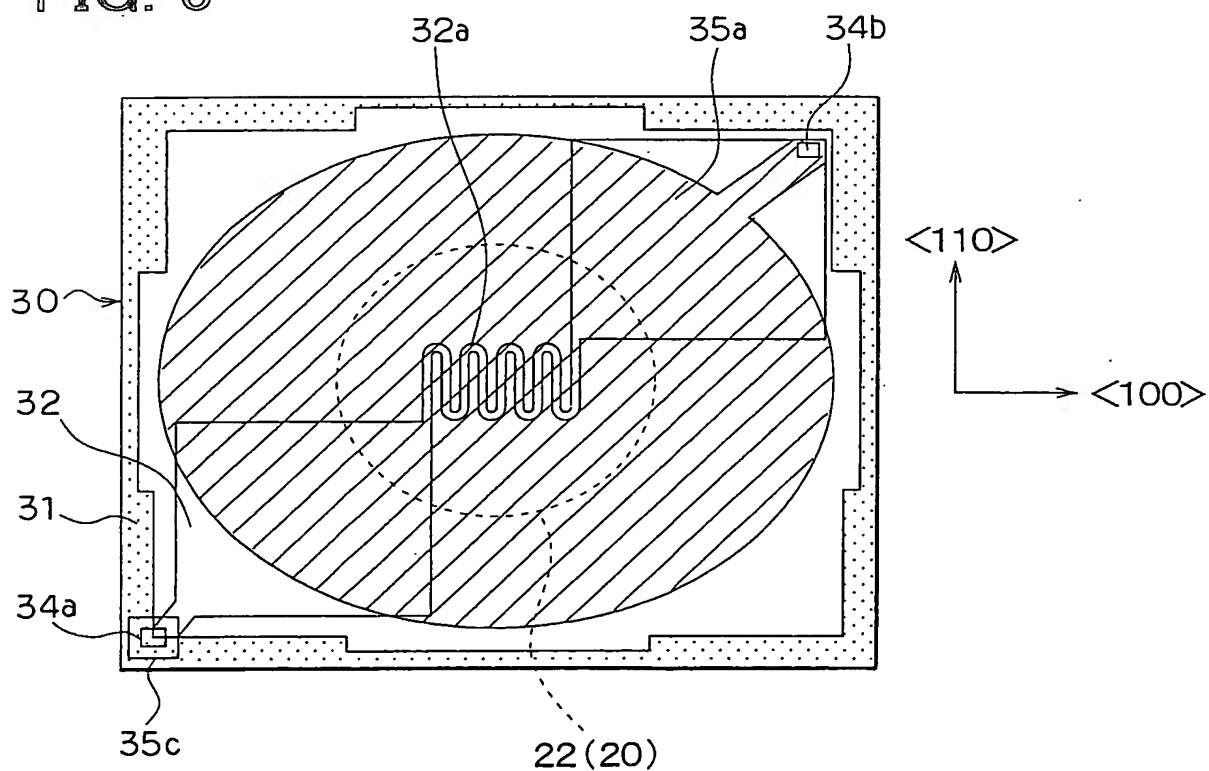


FIG. 6

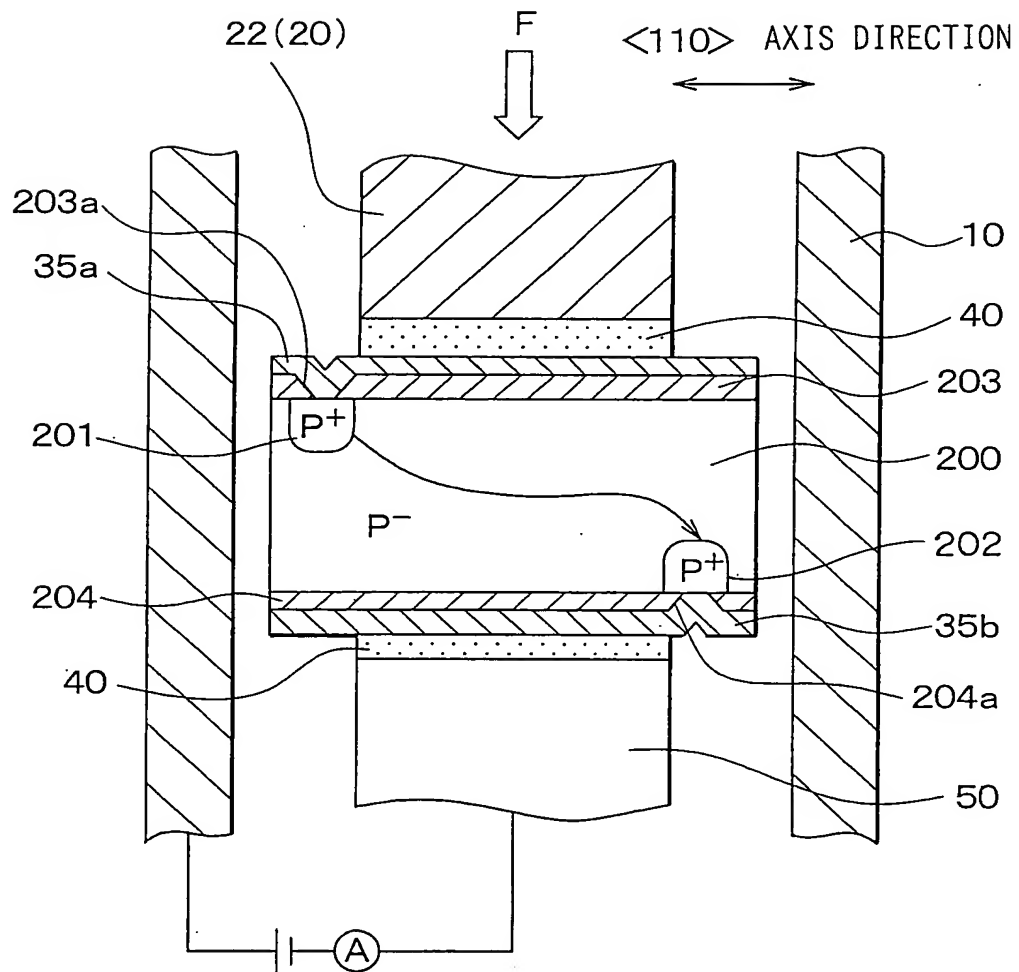


FIG. 7A

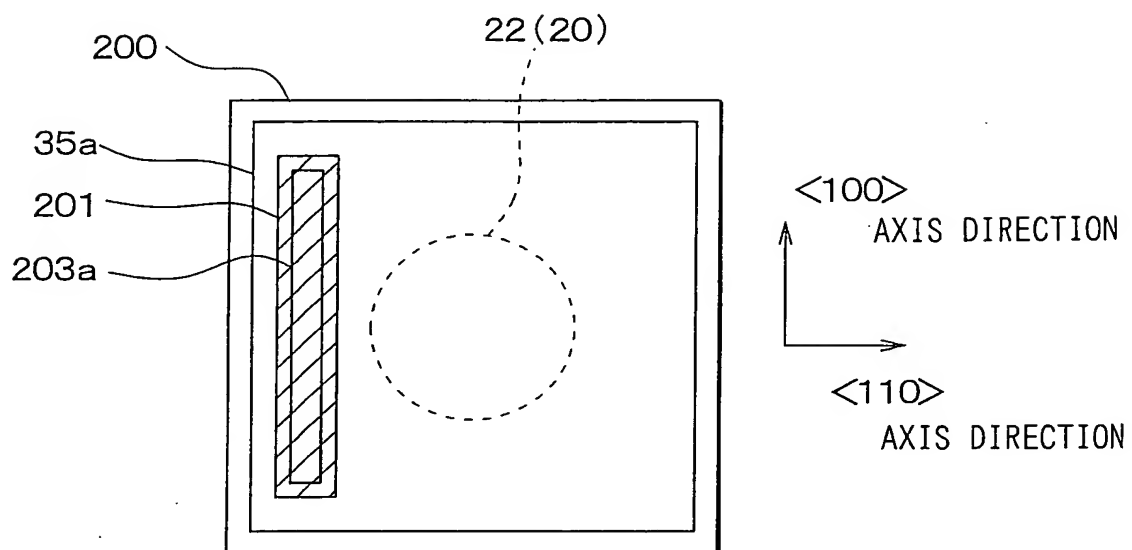


FIG. 7B

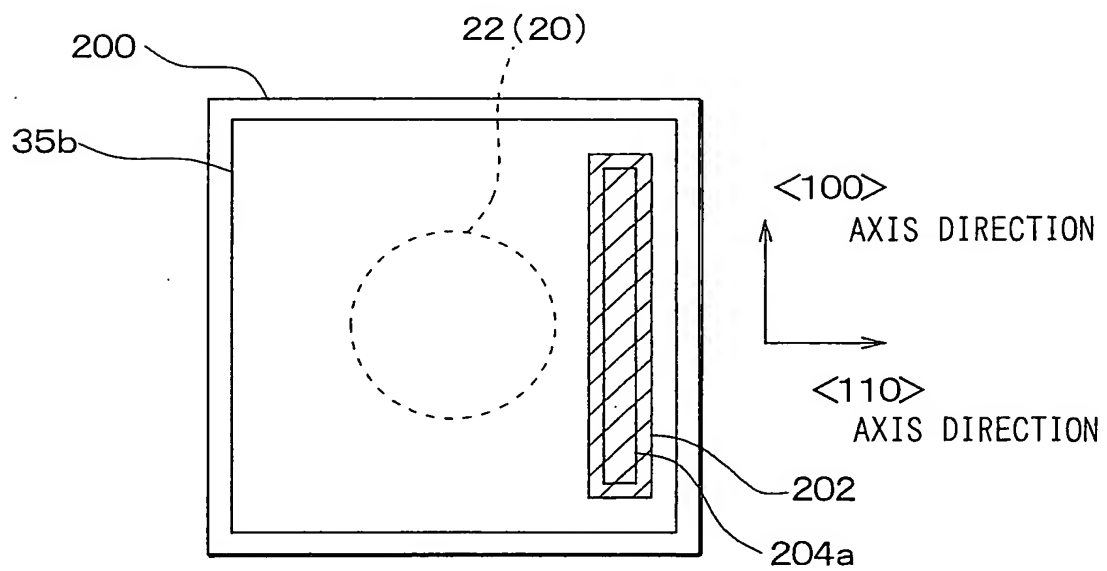


FIG. 8

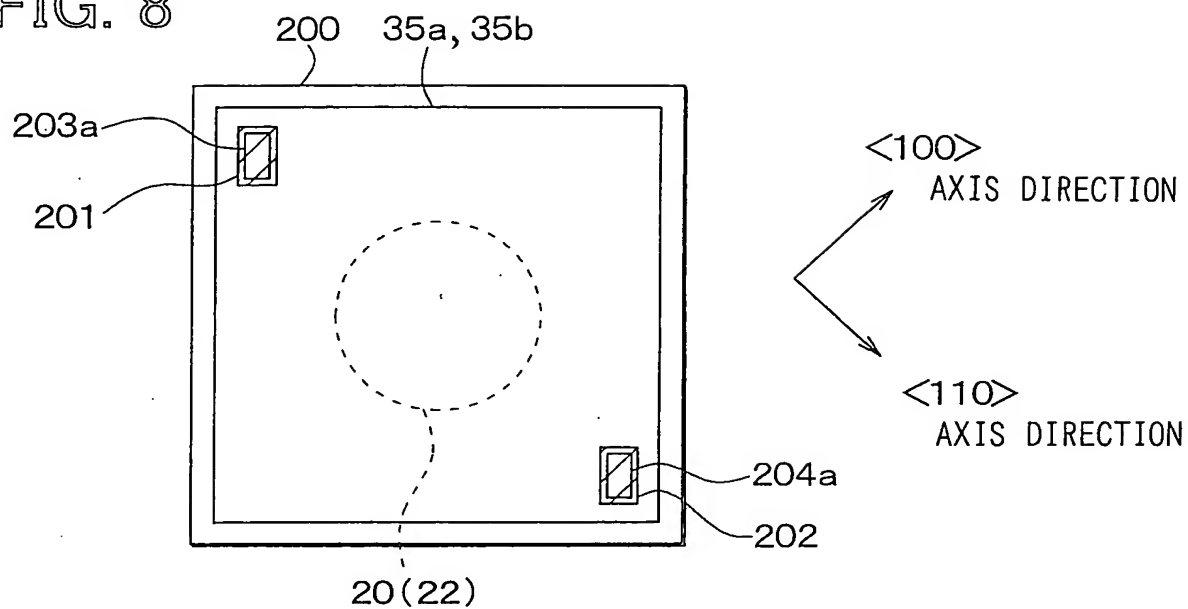


FIG. 9

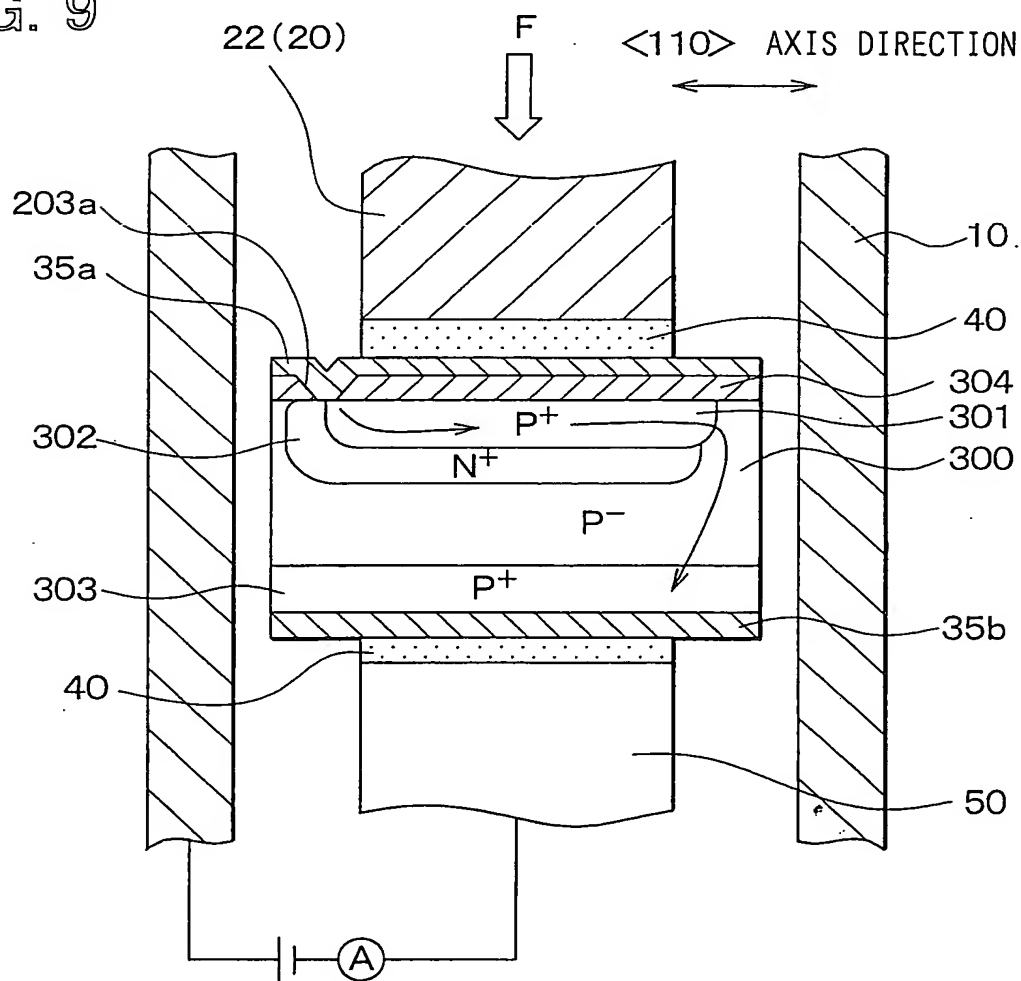


FIG. 11

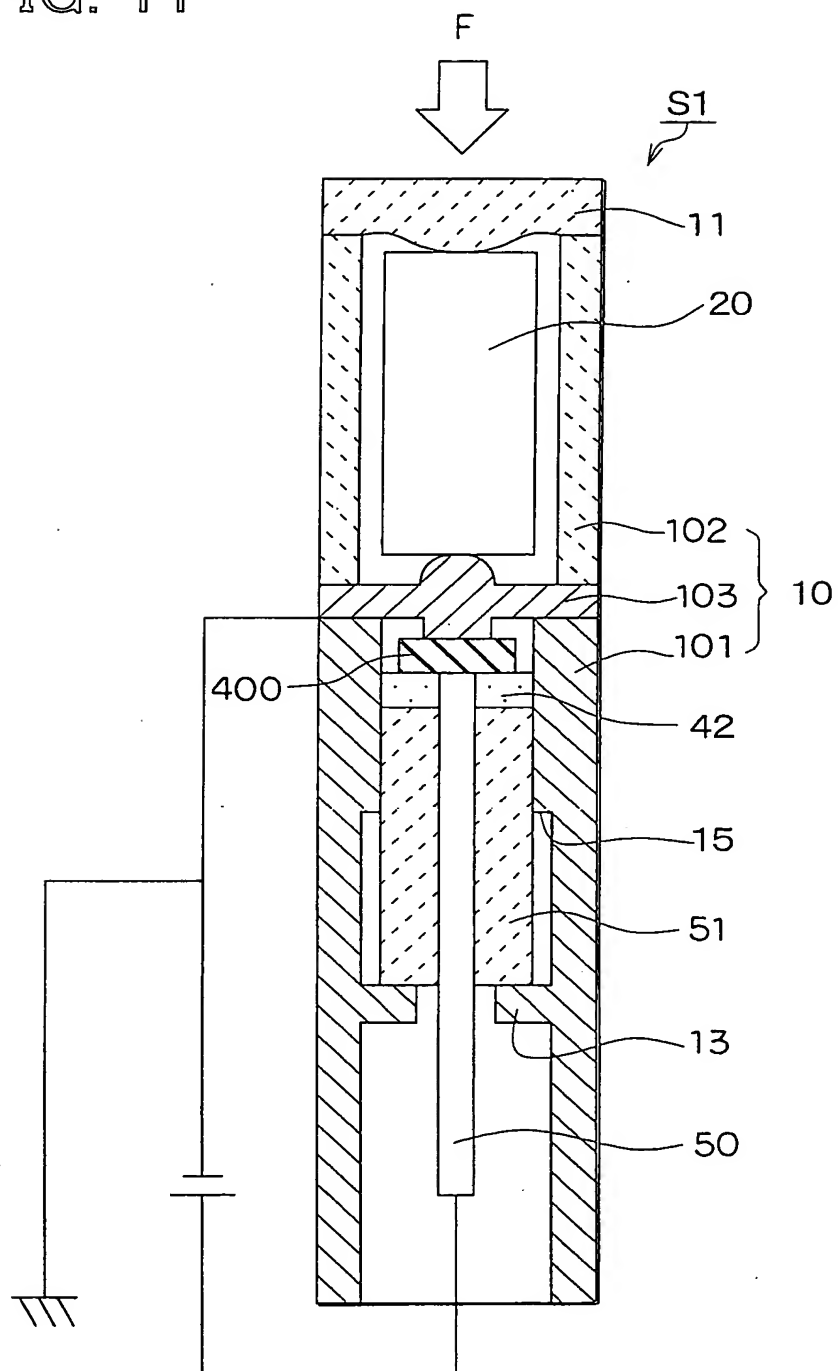


FIG. 10

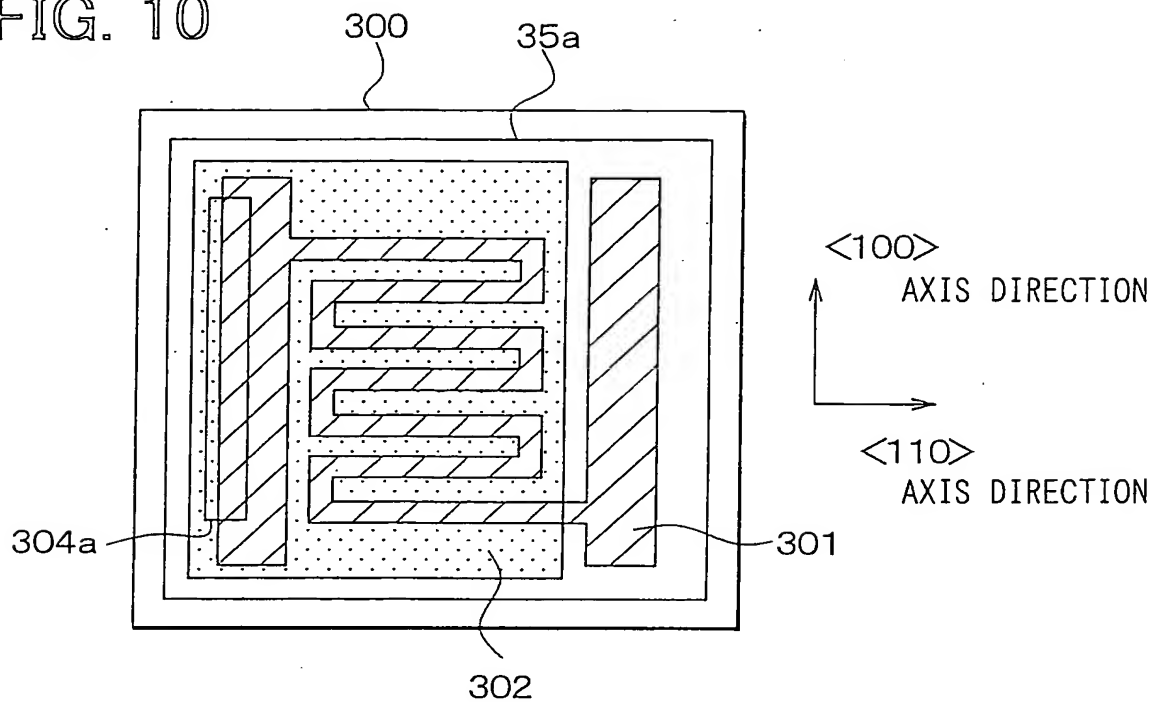


FIG. 12

